

REMARKS

Prior to entry of the instant amendment, claims 1-3, 6, 9, and 11-14 are pending in the subject application. By the instant amendment, claims 1, 6, and 9 are amended; claims 3 and 11-14 are canceled without prejudice to or disclaimer of the subject matter contained therein; and claims 15-21 are added. No new matter is added. Claims 1, 15, and 19 are the independent claims, in which a) claim 1 corresponds to the embodiments of FIGS. 1 and 2 (i.e., the substrate carrying the electronic component is provided with conductive surfaces; and at least the area occupied by the component is covered by an insulating layer); b) claim 15 corresponds to the embodiment of FIG. 4 (i.e., a first substrate with conductive surfaces carries the electronic component, and a second substrate provided with conductive surfaces is assembled on the first substrate so that contact areas of the component connect to the conductive surfaces of the second substrate); and c) claim 19 corresponds to the embodiment of FIG. 5 (i.e., the electronic component made up of a module including a set of flat contacts on one of the faces of the module, each contact of the set being linked with a contact area on the opposite face. The component may be inserted into a window of a first substrate and the contact areas of the opposite face of the module may be connected to conductive surfaces on a second substrate assembled on the first substrate).

Claims 1, 2, 6, 9, and 15-21 are presented to the Examiner for further prosecution on the merits. Favorable reconsideration of this application, in light of the preceding amendments and following remarks, is respectfully requested.

Objections to the Claims

Claim 3 stands objected to due to informalities. Applicant submits that the objection to claim 3 has been rendered moot as claim 3 has been cancelled by this Amendment. Withdrawal of the objection is respectfully requested.

Claims Rejections - 35 U.S.C. § 112

Claims 3 and 6 stand rejected under 35 U.S.C. § 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which Applicant regards as the invention. Applicant respectfully traverses these rejections for the reasons discussed below.

In regard to claim 3, it is respectfully submitted that the rejection to claim 3 has been rendered moot.

In regard to claim 6, it is respectfully submitted that claim 6 has been amended to obviate the rejection.

Reconsideration and withdrawal of the rejection under 35 U.S.C. § 112, second paragraph, are respectfully requested.

Claims Rejections - 35 U.S.C. § 103

Claims 1-3 and 9-11 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 6,851,618 ("Halope"). Applicant respectfully traverses this rejection for the reasons discussed below.

Applicant respectfully submits that the Halope reference fails to disclose, or even suggest, *inter alia*:

applying a layer of insulating material which extends concurrently on the electronic component and at least on the zone of the substrate surrounding said electronic component, wherein the conductive areas

of the electronic component and the conductive tracks of the substrate are in contact to achieve an electric connection via a pressure of application of the insulating material layer on the electronic component, and configured to rub together when repeated stressed are exerted on the substrate.

The Halope reference, on the other hand, discloses a module glued on the bottom of the cavity and rigidly maintained into a PVC material previously melted during hot lamination of the layers to form the card body. *See FIGS. 5 and 6 of Halope*. Further, openings 48 and 50 located in the vicinity of the electronic module reinforce the connection of the module and the link between the internal layers (col. 4, lines 30-54). Therefore, the pressure of the lamination is maintained through the welds of two internal insulating layers 38, 58, and thus, any rubbing movement of the contacts under external constraint is not possible. The position and dimension of the openings are determined in such a way to ensure a strong rigid link between the internal layers 38, 58, made up of soft PVC.

In contrast, example embodiments disclose the electronic component 1 inserted into a cavity 7 of the substrate 5 and its contact 3 are applied against conductive tracks 6 so as to provide a connection made up of stacking two planar surfaces. As such, no conductive glue, solder material, and/or particular reinforcements of the link between the conductive surfaces are required. Only the pressure applied during lamination ensures the electric connection and when the constraints are exerted on the card substrate, the planar surfaces in contact may rub on one another.

Accordingly, Applicant respectfully submits that the Halope reference fails to disclose, or even suggest, "the conductive areas of the electronic component and the conductive tracks of the substrate are in contact to achieve an electric connection via a pressure of application of the insulating material layer on the electronic component,

and configured to rub together when repeated stressed are exerted on the substrate,”
as recited in claim 1.

Since the rejection fails to disclose or suggest each and every element of the rejected claims, Applicant respectfully submits that no *prima facie* case of obviousness has been established with respect to claim 1.

Further, in order to establish a *prima facie* case of obviousness, the Examiner must establish that it would have been obvious for one of ordinary skill to have combined the teachings of the cited documents.¹ One way to establish this would be to show “some articulated reasoning with some rationale underpinning to support the legal conclusion of obviousness” and “identify a reason that would have prompted a person of ordinary skill in the relevant field to combine the elements in the way the claimed new invention does.”² Furthermore, the Examiner must make “*explicit*” this rationale of “the apparent reason to combine the known elements in the fashion claimed,” including a detailed explanation of “the effects of demands known to the design community or present in the marketplace” and “the background knowledge possessed by a person having ordinary skill in the art.”³

It is respectfully submitted that the Examiner has not met these criteria. For example, the Examiner asserts that:

[i]t would have been obvious that at least a small rubbing/friction would occur at the chip contacts with the antenna while repeated stresses are exerted due to pressure on the electronic component and hot injection of fluid (s).⁴

However, it is respectfully submitted that the above statement is merely conclusory and do not comprise an *explicit rational* as required by *KSR Int’l*.

¹ See *KSR Int’l Co. v. Teleflex, Inc.*, 550 U.S. at 398, 82 USPQ2d at 1396 (2007).

² *Id.*

³ *Id.*

⁴ See Office Action mailed February 4, 2009, page 4, first full paragraph.

Therefore, because the Examiner has not provided an explicit analysis as required by *KSR Int'l*, a *prima facie* case of obviousness has not been established.

In addition, Applicant submits that the Halope reference ***teaches away*** of achieving a contact between the conductive areas of the electronic component and the conductive tracks of the substrate via rubbing together when repeated stresses are exerted on the substrate. In particular, the purpose of the Halope device is to provide a **hybrid of contactless** smart card with reinforced connection of the electronic module (col. 2, lines 11-14). Moreover, the Halope reference discloses that stresses applied intentionally or unintentionally to the card is a major disadvantage for hybrid or contactless smart cards (col. 1, lines 36-45). Therefore, one of ordinary skill in the art would not have attempted to modify the device of the Halope reference to arrive at the claimed invention.

In view of the above, Applicant respectfully submits that the Halope reference fails to teach or suggest each and every element of claim 1, and therefore, claim 1 is allowable over the cited prior art. Claims 2, 6 and 9 are dependent from claim 1 and, therefore, also allowable. Accordingly, Applicant respectfully requests that the rejection under 35 U.S.C. §103(a) be reconsidered and withdrawn.

Claim 6 is rejected under 35 U.S.C. § 103(a) as being unpatentable over Halope in view of Japanese Application No. 01020197 ("Ikeda"). Applicant respectfully traverses this rejection for the reasons discussed below.

Claim 6 is believed to be allowable at least for the reasons set forth above regarding claim 1. The Ikeda reference fails to provide the teachings noted above as missing from the Halope reference. Since claim 6 is patentable at least by virtue of its

dependency on claim 1, Applicant respectfully requests that the rejection of claim 6 under 35 U.S.C. § 103(a) be withdrawn.

Claims 12-14 are rejected under 35 U.S.C. § 103(a) as being unpatentable over Halope in view of U.S. Patent No. 5,969,951 ("Fischer"). Applicant respectfully traverses this rejection for the reasons discussed below.

Claims 12-14 are believed to be allowable at least for the reasons set forth above regarding claim 1. The Fischer reference fails to provide the teachings noted above as missing from the Halope reference. Since claims 12-14 are patentable at least by virtue of their dependency on claim 1, Applicant respectfully requests that the rejection of claims 12-14 under 35 U.S.C. § 103(a) be withdrawn.

New Claims

Claims 15-21 have been added in an effort to provide further, different protection Applicant's invention. New claims 15-21 are allowable at least for the reasons somewhat similar to those given for claim 1 and/or for their further features cited therein.

For instance, Applicant submits that in the Halope reference does not disclose or suggest, a second substrate provided with conductive tracks connected to contact areas of a component inserted in a cavity of a first substrate, wherein the component is either in a form of a chip with extended contacts or in form of a chip having contacts on both faces, as taught in independent claims 15 and 19. No new matter is added.

CONCLUSION

In view of the above remarks and amendments, Applicant respectfully submits that each of the pending objections and rejections has been addressed and overcome, placing the present application in condition for allowance. A notice to that effect is respectfully requested. Further, the above remarks demonstrate the failings of the outstanding rejections, and are sufficient to overcome the rejections. However, these remarks are not intended to, nor need they, comprehensively address each and every reason for the patentability of the claimed subject matter over the applied prior art. Accordingly, Applicant does not contend that the claims are patentable solely on the basis of the particular claim elements discussed above.

Pursuant to 37 C.F.R. §§ 1.17 and 1.136(a), Applicant(s) hereby petition(s) for a two (2) months extension of time for filing a reply to the outstanding Office Action and submit the required \$ 490 extension fee herewith.

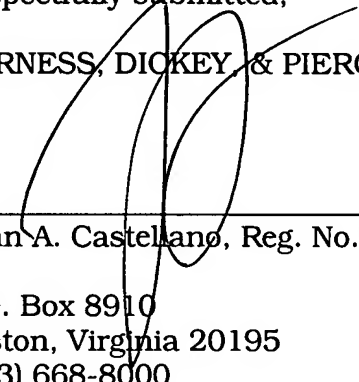
Should there be any outstanding matters that need to be resolved in the present application, the Examiner is respectfully requested to contact the undersigned at the telephone number below.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 08-0750 for any additional fees required under 37 C.F.R. § 1.16 or under 37 C.F.R. § 1.17; particularly, extension of time fees.

Respectfully submitted,

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By



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